PATENT APPLICATION

00766.000052



In re Application of:)
' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	Examiner: Barbara A. Campbell
MICHIO ICHIMURA, et al.)
	: Group Art Unit:
Application No.: 09/856,617)
	: Confirmation No. 3220
Filed: May 24, 2001)
	:
For: NOVEL POLYPEPTIDE) August 12, 2004

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 Attn: Derek A. Putonen

Attorney Advisor

Office of PCT Legal Administration

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2 7 AUG 2004

PETITION TO REVIVE UNAVOIDABLY ABANDONED APPLICATION UNDER 37 CFR § 1.137(a)

Sir:

The procedural progress of this application has stalled. The undersigned would like to commence prosecution on the merits, but first needs to restore the application to pending status. By way of background, the salient events in the file are as follows.

- (1) The application was filed in the Japan/Receiving Office on November 19, 1999.
- (2) An English translation was filed in the US/DO to commence the 09856617 United States National Phase on May 24, 2001. The papers included an executed 11/09/2004 CSHOOT 00000002 061205 99856617 declaration, a CRF and paper copy, among other things. Sale Ref: 00000002 DA#: 061205 110.00 DA

01 FC:1452

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(3) On September 7, 2001 Applicants received a Notification of Missing Requirements (copy attached at Tab A) stating that the CRF was non-compliant because the nucleotide "counters" wrapped around. The error recurred at lines 35, 40, 45, 50, 55, 60, 65, 70,.... This error -- at each fifth line -- was as the only error identified in the Detected Error Printout.

1)

- (4) On September 24, 2001 Applicants timely responded by filing a corrected CRF with smaller margins, thus avoiding the wrapped nucleotide counters.
- Response (copy attached at Tab B). That enclosed Detected Error Printout was <u>identical</u> (note the date at bottom right) to that provided with the September 7, 2001 Notification (3). This means either of two things: (a) The Patent Office did not receive -- or damaged -- Applicants' corrected CRF (since the CRF submitted September 24 did <u>not</u> contain those errors. <u>See</u> partial copy attached at Tab C) or (b) the Patent Office enclosed the wrong Detected Error Printout. It is now seen that the latter is what happened, but the undersigned had no reason at the time to expect the Official Action was <u>at all</u> defective.
- (6) Presuming point (a) above, Applicants sent on August 2, 2002 to the Patent Office additional copies of their previously submitted September 24, 2001 enclosures.
- (7) A second Notification of Defective Response (copy attached at Tab D) issued on January 9, 2003. A new Detected Error Printout accompanied the paper which now identified errors at lines 712, 716, 718, 2165, 2167, 2369, 2384, 2399, 2414, 2622, 2637, 2652, 2667, 2878, 2893, 2908, 2923, 3137, 3152, 3167, 3182, 3484, 3499,

3514, 3529, 3544, 3559, 3574, 3739 and 3753. These were <u>each</u> errors present in the original May 24, 2001 CRF (2) but were <u>never</u> identified in either of the two previous Detected Error Printouts ((3) and (5)).

j:

- (8) Applicants responded on January 22, 2003, attending to the errors noted in (7).
- (9) On June 6, 2003 Applicants received a Notification of Defective Response Abandonment (copy attached at Tab E). The Notification states Applicants failed to correct an error at line 2036 (which, again, was always present but had never earlier been complained of). The stated basis of rejection was that

Applicant has failed to properly respond to the notification of MISSING REQUIREMENTS (Form PCT/DO/EO/905), mailed <u>09/07/2001</u> within the time period set therein. (Emphasis added.)

- (10) Of course, Applicants <u>did</u> properly respond to the September 7, 2001

 Notification and so, on June 19, 2003 filed a Request for Withdrawal of Notification of

 Defective Response Abandonment pointing out that such Response was, in fact, received in
 the Patent Office on September 25, 2001.
- (11) On January 7, 2004 Applicants filed a Request for Decision on Request for Withdrawal of Abandonment.
- (12) A Decision on Petition (undated) was received January 30, 2004 dismissing the Request for Withdrawal on the basis that Applicants' January 22, 2003 sequence listing was not a proper response, noting that

applicant has misinterpreted the Form PCT/DO/EO/918 mailed 06 June 2003. The USPTO does not dispute that

applicant filed a response on 25 September 2001. This filing was received and resulted in the preparation and mailing of a Form PCT/DO/EO/916 mailed 02 July 2002. In addition, applicant subsequently filed responses on 05 August 2002 and 22 January 2003. However, none of the sequence listing filed to date has been in compliance with 37 CRF 1.821-1.825. As such, while timely, the responses were not proper and the application was therefore held to be abandoned. Enclosed with their decision is a courtesy copy of the most recently prepared CRF Problem Report.

Initially, it is not well-understood how the undersigned "misinterpreted" the June 6, 2003 form. The paper plainly stated there was no proper response to the September 7, 2001 Notification of Missing Requirements. Applicants responded accordingly.

Additionally, it is noted that the "courtesy copy" of the CRF Problem Report provided by the PTO on January 30, 2004 had <u>nothing to do</u> with the Notification mailed September 7, 2001. Accordingly, the basis asserted in the June 6, 2003 Notification of Defective Response (9) is without foundation.

(13) In any event, Applicants filed a Request for Reconsideration on February 4, 2004 pointing out that the error relied upon in the Decision and upon which abandonment was founded because Applicant did not correct it earlier, was always in the CRF but was not earlier complained of by the Patent Office. Applicants explained their January 22, 2003 submission (8) attended to all the problems pointed out by the Patent Office up to that date; the Patent Office made no mention of the existent error noted by the Decision (12) before June 6, 2003. The Request for Consideration now attended to this latest CRF error.

Applicants are being penalized for not hitting a moving target. All Applicants sought was a Withdrawal of Abandonment and the opportunity to submit a paper copy and CRF to address the Patent Office's latest concerns.

(14) In response, the Patent Office issued on May 17, 2004 a Decision which states

Applicant is correct that the error found in the Computer-Readable Form (CRF) filed 22 January 2003 had not occurred in previously filed CRF.

This is not entirely accurate; the <u>error</u> was found in all prior CRFs but the Patent Office did not <u>complain of it</u> until June 6, 2003.

In any event, the Decision states that the presently-filed CRF (13) will be forwarded for examination. To date, however, it appears no such examination has occurred and so, there has still been no determination as to whether or not such constitutes a "proper reply".

(15) Accordingly, to timely facilitate such review, Applicants are filing the present Petition. Pursuant to 37 CFR §1.137(a)(1), the previously filed CRF and paper copy are the necessary reply. Pursuant to 37 CRF § 1.137(a)(2), a check in the amount of \$110.00 is enclosed to cover the petition fee under 37 CRF § 1.17(l). Pursuant to 37 CRF § 1.137(a)(3) the entire delay in filing this paper has above shown to be unavoidable and, pursuant to 37 CRF § 1.137(a)(4), no terminal disclaimer is required.

The Assistant Commissioner is respectfully requested to restore this application to pending status and forward it for examination on the merits.

The PTO did nonreceive the following listed item(s)

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

Atterney for Applicants

Lawrence S. Perry

Registration No. 31,865

FITZPATRICK, CELLA, HARPER & SCINTO 30 Rockefeller Plaza New York, New York 10112-2200 Facsimile: (212) 218-2200

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Commissioner for Patents, Box PCT United States Patent and Trademark Office Washington, D.C. 20231 www.uspto.gov

U.S. APPLICATION NO.		FIRST N	AMED APPLICANT		AT	TY. DOCKET NO.				
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2 - Applicant has re	equested early pro	ocessing under 35 U.S.C	2. 371(f) but has	not filed the follow	ving indic	ated items and/or				
the indicated items in	paragraph 3 belo	w. The Basic National I	Fee and the copy	of the international	al applicat	ion must be filed				
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		IN 3(a)-3(d), 4 AND 5 HIS NOTICE OR BY 2								
THE PRIORITY DA	TE FOR THE A	APPLICATION, WHIC	CHEVER IS LA	TER. FAILURE	TO PRO	PERLY				
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☐ PTO-87		FCT/DO/EO/9)20 Rar	bara A. Campt	ell					
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Commissioner for Patents, Box PCT United States Patent and Trademark Office Washington, D.C. 2023

U.S. APPLICATION NO.			www.us		
U.S. AFFEICATION NO.	FIRST NAMED APPLICANT	<u>-</u>	ATTY, DOCKET NO.		
09/856617	ICHIMURA	М	766.52		
		INTERNATIONAL	APPLICATION NO.		
FITZPATRICK CELLA HARPER & 30 ROCKEFELLER PLAZA	PCT/JP99/06487				
NEW YORK, NY 10112		I.A. FILING DATE	PRIORITY DATE		
		19 NOV 99	24 NOV 98		
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NOTIFICATION TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant has submitted papers under 35 U.S.C. 371 to enter the national stage in the United States of America. The items indicated below, however, are missing. The period within which to correct the deficiency noted below and avoid abandonment is set forth in the accompanying Notification.

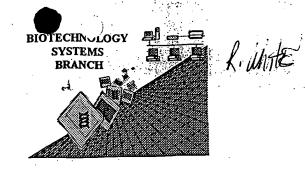
The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):

Barbara A. Campbell

Telephone: 703-305-3631

FORM PCT/DO/EO/920 (March 2001)

RAW SEQUENCE LISTING ERROR REPORT



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/856,6/7Source: 9/856,6/7Date Processed by STIC: 9/856,6/7

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,

2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216. PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax) PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER</u> <u>VERSION 3.0 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address: http://www.uspto.gov/web/offices/pac/checker

PATENT APPLICATION: US/09/856,617

DATE: 06/12/2001 TIME: 12:25:27

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4 <110> APPLICANT: KYOWA HAKKO KOGYO CO., LTD., 6 <120> TITLE OF INVENTION: NOVEL POLYPEPTIDE Does Not Comply 8 <130> FILE REFERENCE: 11169 Corrected Diskette Needed -> 10 <140> CURRENT APPLICATION NUMBER: US/09/856,617 -> 11 <141> CURRENT FILING DATE: 2001-05-24 13 <150> PRIOR APPLICATION NUMBER: H10-332484 14 <151> PRIOR FILING DATE: 1998-11-24 16 <150> PRIOR APPLICATION NUMBER: H11-248442 17 <151> PRIOR FILING DATE: 1999-09-02 19 <160> NUMBER OF SEQ ID NOS: 18 20 <170> SOFTWARE: PatentIn Ver. 2.0 RORED SEQUENCES

22 <210> SEQ ID NO: 1 23 <211> LENGTH: 4173 24 <212> TYPE: DNA 25 <213> ORGANISM: Mouse 27 <220> FEATURE: 28 <221> NAME/KEY: CDS 29 <222> LOCATION: (107)..(4021) 31 <400> SEQUENCE: 1 --> 32 ggcctgggcg gcggcacatc ctaaggtagc ggctgcctga ggtgacagct gcccgtggat 33 60 ---> 35 tcgggccccg gaacgagccg cgctggcggc ggcggcggta gccgcg atg atg gag

36 115 ~ Met Met Glu 37 38

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43

--> 45 tgc tcg ggc tcg gtc atg tcg gag cgt gtg tcg ggc ctg gcg ggc tcc 46 211

47 Cys Ser Gly Ser Val Met Ser Glu Arg Val Ser Gly Leu Ala Gly Ser 48 20

--> 50 atc tac cgc gag ttc gag cgc ctc att cac tgc tat gac gag gag gtg 51 259

52 Ile Tyr Arg Glu Phe Glu Arg Leu Ile His Cys Tyr Asp Glu Glu Val

--> 55 gtc aag gag ctc atg ccg ctg gtg gtg aac gtg ctg gag aac ctt gac

57 Val Lys Glu Leu Met Pro Leu Val Val Asn Val Leu Glu Asn Leu Asp 55

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PATENT APPLICATION: US/09/856,617

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DATE: 06/12/2001

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Input Set : A:\766.52 Seq. Listing.txt
Output Set: N:\CRF3\06122001\1856617.raw

--> 185 gaa gag gtg gag gat gta agc agc tat ctc tgt aca gaa ttg gac aaa 186 1555 187 Glu Glu Val Glu Asp Val Ser Ser Tyr Leu Cys Thr Glu Leu Asp Lys 188 475 --> 190 atc ccc atg gcc cag cgc cga cgc ttc aca cgg gtg gag atg gcc cga 191 1603 192 Ile Pro Met Ala Gln Arg Arg Arg Phe Thr Arg Val Glu Met Ala Arg 193 485 490 port --> 195 gtg ctc atg gaa cgc aac cag tac aag gaa cgc ctc atg gag ctg cag 196 1651 197 Val Leu Met Glu Arg Asn Gln Tyr Lys Glu Arg Leu Met Glu Leu Gln 198 500 505 510 --> 200 gag gct gtg agg tgg act gaa atg atc aga gca tca agg gaa cac cca 201 1699 202 Glu Ala Val Arg Trp Thr Glu Met Ile Arg Ala Ser Arg Glu His Pro 520 525 --> 205 tct gtc cag gag aag aag tcc acc atc tgg cag ttc ttt agt cgc 206 1747 207 Ser Val Gln Glu Lys Lys Lys Ser Thr Ile Trp Gln Phe Phe Ser Arg 540 535 --> 210 ctc ttc agc tcc tca tct agc ccc cct ccg gcc aaa cga tcc tac cca 212 Leu Phe Ser Ser Ser Ser Pro Pro Pro Ala Lys Arg Ser Tyr Pro Jorsege Jenored file, orly Alece pager show as 555 --> 215 tot gtg aac att cac tac aag toa coc act gca gct ggc ttt agc cag 216 1843 217 Ser Val Asn Ile His Tyr Lys Ser Pro Thr Ala Ala Gly Phe Ser Gln 570 --> 220 cgt cgc agc cat gct ttg tgc cag atc tca gcc ggc agc agg ccc ctg 222 Arg Arg Ser His Ala Leu Cys Gln Ile Ser Ala Gly Ser Arg Pro Leu 585 --> 225 gag tto tto cot gat gat gac tgo acc tot tot goo egg egg gag eag 227 Glu Phe Phe Pro Asp Asp Cys Thr Ser Ser Ala Arg Arg Glu Gln --> 230 aag cgg gag cag tac cgc cag gtt cgt gaa cac gtg cgc aat gat gac 232 Lys Arg Glu Gln Tyr Arg Gln Val Arg Glu His Val Arg Asn Asp Asp 615 --> 235 ggg agg ctg cag gcc tgt ggg tgg agc ctg cct gcc aag tac aag cag 237 Gly Arg Leu Gln Ala Cys Gly Trp Ser Leu Pro Ala Lys Tyr Lys Gln 635 ·-> 240 ctg age eec aat gga gge eag gaa gae ace egg atg aaa aat gtg eet 242 Leu Ser Pro Asn Gly Gly Gln Glu Asp Thr Arg Met Lys Asn Val Pro 650 --> 245 gtc cct gtg tac tgt cgc cct ctg gtg gag aag gac cct tcg aca aag

FYL Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents, Box PCT United States Patent and Trademark Office Washington, D.C. 20231

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT ATTY, DOCKET I							
09/856,617	Michio Ichimura	766.52						
		INTERNATIONAL APPLICATION NO. PCT/JP99/06487						
•	•							
05514		I.A. FILING DATE	PRIORITY DATE					
FITZPATRICK CELLA HARPER & SCINTO		11/19/1999	11/24/1998					

NEW YORK, NY 10112

CONFIRMATION NO. 3220 371 FORMALITIES LETTER OC000000008386527

Date Mailed: 07/02/2002

NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as an Elected Office (37 CFR 1.495):

• U.S. Basic National Fee

Priority Document

- Assignee Statement
- Biochemical Sequence Diskette
- Biochemical Sequence Listing
- Copy of IPE Report
- · Copy of references cited in ISR
- Copy of the International Application
- Copy of the International Search Report
- Oath or Declaration
- Preliminary Amendments
- Request for Immediate Examination

FILE NO. ATTORNEY DUE DATE DOCKETED

The following items MUST be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

Additionally the following defects have been observed:

The following items **MUST** be furnished within the period set forth below:

 The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):

- See attached RSL Error Report.
- APPLICANT MUST PROVIDE:
 - An initial or substitute paper copy or compact disc of the "Sequence Listing," as well as an amendment directing its entry into the specification.
 - A statement that the contents of the paper or compact disc and the computer readable form are the same and, where applicable, include no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b) or 1.825(d).
- For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:
 - For Rules Interpretation, call (703) 308-4216
 - To Purchase Patentin Software, call (703) 306-2600
 - For Patentin Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov
 - Additional claim fees of \$90 as a non-small entity, including any required multiple dependent claim fee, are required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due.

SUMMARY OF FEES DUE:

Total additional fees required for this application is \$90 for a Large Entity:

- Total additional claim fee(s) for this application is \$90
 - \$90 for 33 total claims over 20.

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

A copy of this notice MUST be returned with the response.

BARBARA A CAMPBELL

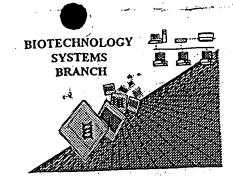
Telephone: (703) 305-3631

PART 1 - ATTORNEY/APPLICANT COPY

A		
U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
09/856,617	PCT/JP99/06487	766.52

FORM PCT/DO/EO/916 (371 Formalities Notice)

ompbel



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: <u>09</u>/ Source: Date Processed by STIC:

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS. PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE

APPLICANT, WITH A NOTICE TO COMPLY or,

TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216. PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax) PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2Kcompliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address: http://www.uspto.gov/web/offices/pac/checker

PATENT APPLICATION: US/09/856,617

DATE: 06/12/2001 TIME: 12:25:27

Input Set : A:\766.52 Seq. Listing.txt Output Set: N:\CRF3\06122001\1856617.raw

4 <110> APPLICANT: KYOWA HAKKO KOGYO CO., LTD., 6 <120> TITLE OF INVENTION: NOVEL POLYPEPTIDE

8 <130> FILE REFERENCE: 11169

C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/856,617

C--> 11 <141> CURRENT FILING DATE: 2001-05-24

13 <150> PRIOR APPLICATION NUMBER: H10-332484

14 <151> PRIOR FILING DATE: 1998-11-24

16 <150> PRIOR APPLICATION NUMBER: H11-248442

17 <151> PRIOR FILING DATE: 1999-09-02

19 <160> NUMBER OF SEQ ID NOS: 18

20 <170> SOFTWARE: PatentIn Ver. 2.0

Does Not Comply Corrected Diskette Needed

ERRORED SEQUENCES

22 <210> SEQ ID NO: 1

23 <211> LENGTH: 4173

24 <212> TYPE: DNA

25 <213> ORGANISM: Mouse,

27 <220> FEATURE:

28 <221> NAME/KEY: CDS

29 <222> LOCATION: (107)..(4021)

31 <400> SEQUENCE: 1

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E--> 35 togggcooog gaacgagoog ogotggogge ggoggoggta geogog atg atg gag

36 115 -

Met Met Glu 37

38

E--> 40 atc cag atg gac gag gga gga ggt gtg gtg gtg tac caa gac gac tac

42 Ile Gln Met Asp Glu Gly Gly Gly Val Val Val Tyr Gln Asp Asp Tyr

E--> 45 tgc tog ggc tog gtc atg tog gag ogt gtg tog ggc otg gog ggc toc

47 Cys Ser Gly Ser Val Met Ser Glu Arg Val Ser Gly Leu Ala Gly Ser

E--> 50 atc tac cgc gag ttc gag cgc ctc att cac tgc tat gac gag gag gtg

52 Ile Tyr Arg Glu Phe Glu Arg Leu Ile His Cys Tyr Asp Glu Glu Val

E--> 55 gtc aag gag ctc atg ccg ctg gtg gtg aac gtg ctg gag aac ctt gac

57 Val Lys Glu Leu Met Pro Leu Val Val Asn Val Leu Glu Asn Leu Asp

E--> 60 tog gtg ctg ago gag aac cag gag cac gag gtg gag ctg gag ctc cta

61 355

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PATENT APPLICATION: US/09/856,617

62 Ser Val Leu Ser Glu Asn Gln Glu His Glu Val Glu Leu Glu Leu

DATE: 06/12/2001 TIME: 12:25:27

Input Set : A:\766.52 Seq. Listing.txt
Output Set: N:\CRF3\06122001\1856617.raw

E--> 65 cgc gag gac aac gag cag ctg ctc acg caa tac gag cgc gag aag gcg 67 Arg Glu Asp Asn Glu Gln Leu Leu Thr Gln Tyr Glu Arg Glu Lys Ala E--> 70 ctg cgc aaa cag gcc gag gag aaa ttc atc gaa ttt gaa gat gcc ttg 72 Leu Arg Lys Gln Ala Glu Glu Lys Phe Ile Glu Phe Glu Asp Ala Leu 105 73 100 E--> 75 gaa caa gag aag aaa gaa ctc cag atc cag gta gaa cat tat gag ttt 76 499 77 Glu Gln Glu Lys Lys Glu Leu Gln Ile Gln Val Glu His Tyr Glu Phe 125 120 E--> 80 cag aca cgc cag ctg gag cta aag gcc aaa aac tat gca gat cag att 81 547 82 Gln Thr Arg Gln Leu Glu Leu Lys Ala Lys Asn Tyr Ala Asp Gln Ile E--> 85 tcc cga ctg gag gaa cga gaa tcg gag atg aag aag gaa tac aat gcc 86 595 87 Ser Arg Leu Glu Glu Arg Glu Ser Glu Met Lys Lys Glu Tyr Asn Ala 155 E--> 90 ctg cac cag cgg cac aca gag atg atc cag acc tat gtg gaa cac att 91 643 92 Leu His Gln Arg His Thr Glu Met Ile Gln Thr Tyr Val Glu His Ile E--> 95 gaa aga too aag atg cag caa gtt ggg ggt ago ggc caa aca gaa ago 96 691 97 Glu Arg Ser Lys Met Gln Gln Val Gly Gly Ser Gly Gln Thr Glu Ser E--> 100 agc ctg ccc ggg cgg agg aag gag cgt ccc acc tct ctg aat gtc ttc 101 739 102 Ser Leu Pro Gly Arg Arg Lys Glu Arg Pro Thr Ser Leu Asn Val Phe 103 E--> 105 ccc. ctg. gct. gat. ggc atg. tgt. cca aac gat. gag. atg. tct. gag. tca. ggc 107 Pro Leu Ala Asp Gly Met Cys Pro Asn Asp Glu Met Ser Glu Ser Gly 108 E--> 110 cag tee tea gea get gea aca eee agt ace aca ggt ace aag tee aac 111 835 112 Gln Ser Ser Ala Ala Ala Thr Pro Ser Thr Thr Gly Thr Lys Ser Asn 230 235 E--> 115 aca ccc acg tcc tcc gtg ccc tca gca gca gtc acg cca ctc aac gag 116 883 117 Thr Pro Thr Ser Ser Val Pro Ser Ala Ala Val Thr Pro Leu Asn Glu E--> 120 ago cta cag ccc ctg ggg gac tat gtc agt gtc aca aag aac aac aag 121 931 122 Ser Leu Gln Pro Leu Gly Asp Tyr Val Ser Val Thr Lys Asn Asn Lys

sur

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/856,617

DATE: 06/12/2001 TIME: 12:25:27

Input Set : A:\766.52 Seq. Listing.txt
Output Set: N:\CRF3\06122001\1856617.raw

	123	260	* *.		•		265			• • •		270					275
E>			acc	сда	gag	aaσ		aat					gag	qtc	caq	qtc	acc
		979	, 500	,-9-	2-3		-5-			3 -				J -,-	5	J	
		Gln	Ala	Ara	Glu	Lvs	Ara	Asn	Ser	Arg	Asn	Met	Glu	Val	Gln	Val	Thr
	128					280	_			,	285					290	
E>		caa	σασ	atσ	caa			agt	atc	aac	ato	aac	age	agt	gac	gag	taa
		1027			~55	uuo	900	-5-		990		55	- 5,-	-3-	٠	J-J	- 55
		Gln		Met	Ara	Asn	Val	Ser	Tle	Glv	Met.	Glv	Ser	Ser	Asp	Glu	Trp
	133				295					300		1			305		
E>			gat	att		σac	att	atc	gac			cca	σασ	cta		ata	tat
		1075	. –	,	oug	guo			544				5-5	5		3-3	- 5 -
•		* .		Va l	Gln	Asp	Tle	Tle	Asp	Ser	Thr	Pro	Glu	Leu	Asp	Val	Cys
	138		_	310	· · · · ·				315	-				320			-1-
E>		cct			cat	cta	ααα	cac		aas	agc	age	cca		cag	ασa	att
-		1123	-	400	og c	ceg	949	ogo.	uou	554 .			,			33 -	
		Pro		Thr	Ara	T.eu	Glu	Arα	Thr	Glv	Ser	Ser	Pro	Thr	Gln	Glv	Ile
	143		325	****		Deu	-	330	****			-	335			1	
E>		σta		aaa	act	+++	aaa		aac	act	gac	tcc		tat	cac	gaa	ctc
		1171		uuu	900		994	u co	uuu	400	Juo	-				J	
		Val		T.vs	Ala	Phe	Glv	Tle	Asn	Thr	Asp	Ser	Len	Tvr	His	Glu	Leu
		340		1170			345	110				350	200	-1-		024	355
E>			acá	aca.	aas	tct		atc	atc	aaa	gat		gac	σασ	gga	act	
٠,		1219		909	ggu		949	900	ucc	999	gue	9 -9	940	2~2	224	900	540
		Ser		Ala	Glv	Ser	Glu	Val	Tle	Glv	Asp	Va 1	Asp	Glu	Glv	Ala	Asp
	153				011	360	Q			U -1.	365				-1	370	
E>		ctc	cta	aaa	gag		tca	ata	cac	σat.		ttt	ttt	aaa	atσ		aaa
		1267		223	949			9 - 9	090	344	540			994		220	
		Leu		Glv	Glu	Phe	Ser	Val	Ara	Asp	Asp	Phe	Phe	Glv	Met	Glv	Lvs
	158			U	375		001		9	380	ПОР			0-1	385	011	272
E>		gaa	ata	aaa		cta	cta	cta	σασ		tca	саά	ctt	cta		aca	aaa
		1315		333			~~	5	5-5			5	•		3-3		
		Glu		Glv	Asn	Leu	Leu	Leu	Glu	Asn	Ser	Gln	Leu	Leu	Glu	Thr	Lvs
	163			390			-,		395					400			-1 -
E>		aat	act	tta	aat	σta	ata	aaσ	aat	gac	ctc	att	act	aaσ	att	gac	caa
		1363					3-5			J			<i>J</i>		J		
	167	Asn	Ala	Leu	Asn	Val	Val	Lvs	Asn	Asp	Leu	Ile	Ala	Lvs	Val	Asp	Gln
	168		405					410		• ,			415	•		. •	
E>	170	ctq	tca	qqa	gaa	caq	gag	qtc	ctq	aaq	ggt	qaq	cta	gaa	qca	qcc	aaq
		1411					, ,	•			,	, ,	. •			-	_
	172	Leu	Ser	Glv	Glu	Gln	Glu	Val	Leu	Lys	Gly	Glu	Leu	Glu	Ala	Ala	Lys
	173			- 1			425				. •	430					435
E>			aca	aaa	atc	aaq		σαά	aac	ста.	atc		gag	ctt	gaa	gaa	gaa
•		1459			J		,	J-J		- 3					J		•
		Gln		Lys	Val	Lvs	Leu	Glu	Asn	Ara	Ile	Lys	Glu	Leu	Glu	Glu	Glu
	178			-1-		440					445					450	
E>		cta	aag '	aga	atc		tca	gaig	qca	σta'		qcc	cac	cat	σaσ		aga
		1507			J			J-13						- 5 -	J3		-
		Leu		Arq	Val	Lys	Ser	Glu	Ala	Val	Thr	Ala	Arq	Arq	Glu	Pro	Arq
v ³⁸ 1804	183				455	-				460	4112		•	_	465		
-	. * .																

some

PATENT APPLICATION: US/09/856,617

DATE: 06/12/2001 TIME: 12:25:27

Input Set : A:\766.52 Seq. Listing.txt
Output Set: N:\CRF3\06122001\1856617.raw

E--> 185 gaa gag gtg gag gat gta agc agc tat ctc tgt aca gaa ttg gac aaa 186 1555 187 Glu Glu Val Glu Asp Val Ser Ser Tyr Leu Cys Thr Glu Leu Asp Lys 475 E--> 190 atc ccc atg gcc cag cgc cga cgc ttc aca cgg gtg gag atg gcc cga 191 1603 192 Ile Pro Met Ala Gln Arg Arg Phe Thr Arg Val Glu Met Ala Arg E--> 195 gtg ctc atg gaa cgc aac cag tac aag gaa cgc ctc atg gag ctg cag 196 1651 197 Val Leu Met Glu Arg Asn Gln Tyr Lys Glu Arg Leu Met Glu Leu Gln 505 E--> 200 gag gct gtg agg tgg act gaa atg atc aga gca tca agg gaa cac cca 201 1699 202 Glu Ala Val Arg Trp Thr Glu Met Ile Arg Ala Ser Arg Glu His Pro E--> 205 tot gto cag gag aag aag too acc atc tgg cag tto ttt agt cgc 206 1747 207 Ser Val Gln Glu Lys Lys Ser Thr Ile Trp Gln Phe Phe Ser Arg E--> 210 ctc ttc agc tcc tca tct agc ccc cct ccg gcc aaa cga tcc tac cca 211 1795 212 Leu Phe Ser Ser Ser Ser Pro Pro Pro Ala Lys Arg Ser Tyr Pro 213 E--> 215 tot gtg aac att cac tac aag toa coc act gca gct ggc ttt agc cag 216 1843 217 Ser Val Asn Ile His Tyr Lys Ser Pro Thr Ala Ala Gly Phe Ser Gln E--> 220 cgt cgc agc cat gct ttg tgc cag atc tca gcc ggc agc agg ccc ctg 221 1891 222 Arg Arg Ser His Ala Leu Cys Gln Ile Ser Ala Gly Ser Arg Pro Leu 223 580 585 E--> 225 gag tto tto cot gat gat gac tgo acc tot tot goo egg egg gag cag 227 Glu Phe Phe Pro Asp Asp Cys Thr Ser Ser Ala Arg Arg Glu Gln E--> 230 aag cgg gag cag tac cgc cag gtt cgt gaa cac gtg cgc aat gat gac 231 1987 232 Lys Arg Glu Gln Tyr Arg Gln Val Arg Glu His Val Arg Asn Asp Asp 620 E--> 235 ggg agg ctg cag gcc tgt ggg tgg agc ctg cct gcc aag tac aag cag 236 2035 237 Gly Arg Leu Gln Ala Cys Gly Trp Ser Leu Pro Ala Lys Tyr Lys Gln 635 E--> 240 ctg agc ccc aat gga ggc cag gaa gac acc cgg atg aaa aat gtg cct 241 2083 242 Leu Ser Pro Asn Gly Gly Gln Glu Asp Thr Arg Met Lys Asn Val Pro E--> 245 gtc cct gtg tac tgt cct ctg gtg gag aag gac cct tcg aca aag

Due i Sorrige Denoved Jele, orly Alece pager show as sample of global error

Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

SEQUENCE LISTING <110> KYOWA HAKKO KOGYO CO., LTD., <120> NOVEL POLYPEPTIDE <130> 766.52 <140> US 09/856,617 <141> 2001-05-24 <150> H10-332484 <151> 1998-11-24 <150> H11-248442 <151> 1999-09-02 <160> 18 <170> PatentIn Ver. 2.0 <210>1 <211>4173 <212> DNA <213> Mouse <220> <221> CDS <222> (107)..(4021) <400> 1 ggcctgggcg gcggcacatc ctaaggtagc ggctgcctga ggtgacagct gcccgtggat 60 tcgggccccg gaacgagccg cgctggcggc ggcggcggta gccgcg atg atg gag Met Met Glu 1 atc cag atg gac gag gga ggt gtg gtg gtg tac caa gac gac tac 163 Ile Gln Met Asp Glu Gly Gly Val Val Val Tyr Gln Asp Asp Tyr 5 10 15 tgc tcg ggc tcg gtc atg tcg gag cgt gtg tcg ggc ctg gcg ggc tcc 211

atc tac cgc gag ttc gag cgc ctc att cac tgc tat gac gag gag gtg 259

Cys Ser Gly Ser Val Met Ser Glu Arg Val Ser Gly Leu Ala Gly Ser

35

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25

PRIORITY DATE

11/24/1998



UNITED STATES PATENT AND TRADEMARK OFFICE

Chippessioner for Ruberts, Bo United Stiffes Patient and Tradsmark (Washington, D.C.

U.S. APPLICATION NUMBER NO. FIRST NAMED APPLICANT ATTY. DOCKET NO. 09/856,617 Michio Ichimura 766.52 INTERNATIONAL APPLICATION NO. PCT/JP99/06487 I.A. FILING DATE

05514 FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA NEW YORK, NY 10112

CONFIRMATION NO. 3220 371 FORMALITIES LETTER *OC000000009349516*

11/19/1999

Date Mailed: 01/09/2003

NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as an Elected Office (37 CFR 1.495):

- U.S. Basic National Fee
- Priority Document
- Assignee Statement
- Biochemical Sequence Diskette
- Biochemical Sequence Listing
- Copy of IPE Report
- Copy of references cited in ISR
- Copy of the International Application
- Copy of the International Search Report
- · Oath or Declaration
- Preliminary Amendments
- · Request for Immediate Examination

Applicant's response filed 08/05/2002 is hereby acknowledged. The following requirements set forth in the NOTIFICATION of MISSING REQUIREMENTS mailed 09/07/2001 have not been completed.

The following items MUST be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).

Additionally the following defects have been observed:

Additional claim fees of \$90 as a non-small entity, including any required multiple dependent claim fee, are

required. Applicant must submit the additional claim fees or cancel the additional claims for which fees are due.

SUMMARY OF FEES DUE:

Total additional fees required for this application is \$90 for a Large Entity:

- Total additional claim fee(s) for this application is \$90
 - \$90 for 33 total claims over 20.

The following items MUST be furnished within the period set forth below:

- The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):
 - See attached Raw Sequence Listing Error Report.
 - APPLICANT MUST PROVIDE:
 - An initial or substitute paper copy or compact disc of the "Sequence Listing," as well as an amendment directing its entry into the specification.
- For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:
 - For Rules Interpretation, call (703) 308-4216
 - To Purchase Patentin Software, call (703) 306-2600
 - For Patentln Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

A copy of this notice MUST be returned with the response.

BARBARA A CAMPBELL

Telephone: (703) 305-3631

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY, DOCKET NO.
09/856,617	РСТ/ЈР99/06487	766.52

FORM PCT/DO/EO/916 (371 Formalities Notice)



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:	09/856,617A
Source:	PCT09
Date Processed by STIC:	12/4/02

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
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RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/856,617A

DATE: 12/04/2002 TIME: 13:50:11

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Output Set: N:\CRF4\12032002\1856617A.raw

- 3 <110> APPLICANT: KYOWA HAKKO KOGYO CO., LTD.,
- 5 <120> TITLE OF INVENTION: NOVEL POLYPEPTIDE
- 7 <130> FILE REFERENCE: 766.52
- 9 <140> CURRENT APPLICATION NUMBER: US 09/856,617A
- 10 <141> CURRENT FILING DATE: 2001-05-24
- 12 <150> PRIOR APPLICATION NUMBER: H10-332484
- 13 <151> PRIOR FILING DATE: 1998-11-24
- 15 <150> PRIOR APPLICATION NUMBER: H11-248442
- 16 <151> PRIOR FILING DATE: 1999-09-02
- 18 <160> NUMBER OF SEQ ID NOS: 18
- 19 <170> SOFTWARE: PatentIn Ver. 2.0

ERRORED SEQUENCES

- 372 <210> SEQ ID NO: 2 373 <211> LENGTH: 4200 374 <212> TYPE: DNA 375 <213> ORGANISM: Mouse 377 <220> FEATURE: 378 <221> NAME/KEY: CDS 379 <222> LOCATION: (107)..(4045) 381 <400> SEQUENCE: 2 382 ggcctgggcg gcggcacate ctaaggtage ggctgcctga ggtgacaget gcccgtggat 60
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388 atc cag atg gac gag gga gga ggt gtg gtg gtg tac caa gac gac tac 163 389 Ile Gln Met Asp Glu Gly Gly Val Val Val Tyr Gln Asp Asp Tyr

10 15 392 tgc tcg ggc tcg gtc atg tcg gag cgt gtg tcg ggc ctg gcg ggc tcc 211

393 Cys Ser Gly Ser Val Met Ser Glu Arg Val Ser Gly Leu Ala Gly Ser 25 30

396 atc tac cgc gag ttc gag cgc ctc att cac tgc tat gac gag gag gtg 259

397 Ile Tyr Arg Glu Phe Glu Arg Leu Ile His Cys Tyr Asp Glu Glu Val 398 40 45

307 400 gtc aag gag ctc atg ccg ctg gtg gtg aac gtg ctg gag aac ctt gac 401 Val Lys Glu Leu Met Pro Leu Val Val Asn Val Leu Glu Asn Leu Asp

55 60

355 404 tcg gtg ctg agc gag aac cag gag cac gag gtg gag ctg gag ctc cta

405 Ser Val Leu Ser Glu Asn Gln Glu His Glu Val Glu Leu Glu Leu Leu 75

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•	680	tct ggg	gag	ggg a	cc cgc	cca	ggg g	gc at	c atc	cat	gtg	tat	ggg	gac	36	67		
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		Glu Arg	Ser	His I		Val	Trp G	Sin Va		_	Thr	Pro	Glu		_			
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PATENT APPLICATION: US/09/856,617A

DATE: 12/04/2002 TIME: 13:50:11

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	2118																		
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	2119			290					295					300	•	·			
	2121	gag	tct	gat	gġt	gag	gat	gag	cat	gag	gca	ggc	cgt	gcc	ggg	cag	cca	963	
	2122	Glu	Ser	Asp	Gly	Glu	Asp	Glu	His	Glu	Ala	Gly	Arg	Ala	Gly	Gln	Pro		
	2123		305	-			-	310				-	315		-				
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	2125																	TOTT	
	2126	Glu	Ala	Gly	Asp	Gly	Thr	Thr	Glu	Ile	Ser	Pro	Thr	Gly	Ala	Ala	GLy		
	2127	320					325					330					335		
	2129	cct	gag	aaα	agg	atα	gag	aaσ	aaσ	acα	σaσ	caσ	caσ	caa	caa	caa	σασ	1059	
	2130																		
		LIO	Giu	БУЗ	nrg		GIU	цуз	цуз	1111		GIII	OIII	nr 9	<i>m</i> 9		OIU.		
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	2139			370					375			•		380					
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	2142	Val	Ala	Arq	Arq	Leu	Ala	Glu	Leu	Ala	Arq	Arq	Arg	Glu	Gln	Arg	Arg		
	2143		385					390				_	395			_	-		
	2145	2+2		003	cta	aca	a > a		asc.	220	CCC	cas		cta	aas	caa	ctc	1251	
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	2153																	1347	
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	2161																	1443	
	2162	Lys		Lys	Arg	Lys	Tyr	Lys	Val	ГÀЗ	Leu	Val		ьуs	Arg	Ala	Tyr		
	2163		465					470					475						177.
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	2176	Met	Met	GLu	TTe	Gln	Met	Asp	GLu	GLY	GLY	GTA	Val	val	val		GIN		
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2179 Asp Asp Tyr Cys Ser Gly Ser Val Met Ser Glu Arg Val Ser Gly Leu

2180

PATENT APPLICATION: US/09/856,617A TIME: 13:50:11

Input Set : A:\SEQUENCE LISTING.txt
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Seq.9

DATE: 12/04/2002

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Input Set: A:\SEQUENCE LISTING.txt
Output Set: N:\CRF4\12032002\1856617A.raw

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Input Set : A:\SEQUENCE LISTING.txt
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	2887 2889		Ser	1075 Gln	Val	Arg		Leu	LO80 Ala	Trp	Ile		Asp	1085 Gly	Val	Trp	Val
	2890 2892		l090 Ile	Ara	Leu	Asp		1095 Thr	Leu	Ara	Leu		l100 His	Ala	His	Thr	His
E>	2893	(105				1	1110				1	1115				1	L120
	2895 2896				1	125					1130	_			_ 1	.135	
-	2898 2899				1140)			1	L145	-			1	L150		
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	2904 2905	1	170				1	175				1	1180				
E>	2907 2908	185				1	190				1	1195				3	200
	291029112913				. 1	.205]	L210				1	.215	
	2914 2916				1220)			1	1225				1	1230		_
				- Y	112.0	9			v а <u>т</u>	цуз	1116	T 11G	val	PET	val	LIO	Эту

Input Set : A:\SEQUENCE LISTING.txt
Output Set: N:\CRF4\12032002\1856617A.raw

	2917		1	L235]	L240				-	1245			
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E>	2923			-			1270					1275		-			L280
	2925		Asn	Ala	Leu	Val	Leu	Ser	Glv	Glv			Tvr	Ile	Asp		
	2926					1285			1	_	1290	1	-1-		_	1295	5
•	2928	Tle	Glv	Asp			Asp	Asp	Glu			Glu	Cvs	Ala			Val
	2929		-1	-10-	1300		1101	пор		1305	02.4	010	0,0		1310	пор	
	2931	Asn	Gln	Thr			Ser	T.e.ii			Δla	Glu	Ara			Tle	Tle
	2932	11011		1315	2,0	110	001		1320	цуо	1114	Oru	_	1325	1110	110	110
	2934	Val			Val	Ser	Tyr			Glu			•	1323			
	2935		1330	OIII	vul	DCI		1335	110	ĢΞū							
	2938			TO TE	. או	. 12	-	1333									
	2939																
	2940					550											
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	2943						50										
	2944						Mot	λαν	Clu	C1,,	C1,,	C1,,	W-1	Wal	17-1	Фvv	Cln
	2945	1	Hec	Giu	116	5	nec	изр	Gru	σту	10	сту	vaı	vaı	Val	15	GIII
			7 an	ጥ፣፣∽	Cvic	_	C1	Cor	17.2.1	Mot		C1	71 ** ~	Wa I	Com		T 0
	2947 2948	изр	мър	тут	20	261	СТУ	ser	vai	25	ser	GIU	Arg	val	30	GIY	ren.
		ת 1 ת	C1	C0~		П	7 ~ ~	C1	Dha		70	T	т1.	114.5		m	7
	2950 2951	Ala	СТУ	35	тте	TAT	Arg	GTU		GIU	Arg	ьeu	rre		Cys	ıyı	Asp
		C1	C1		17-1	T	C1	T	40	D	T	17-1		45	17- 1	т	C1
	2953	GIU		val.	val	гÀг	GIU		мет	Pro	ьeu	val		Asn	val	Leu	GIU
	2954	7	50	7 000	Can	170.3	τ	55	C1	7	C1	C1	60	C1	171	C1	T
	2956		Leu	Asp	ser	vai		ser	GIU	ASII	GIN		HIS	GIU	vai	GIU	
	2957	65	T	T	7	C1	70	71	G1	C1	7	75	m)	Q1	m	G1	80
	2959	GIU	ьeu	Leu	Arg		Asp	ASI	GIU	GIN		ьeu	Thr	GIN	Tyr		Arg
	2960	G1	T	70.1 -	т	85	т	01 -	70.7	0.1	90		D.I	7 3	~ 1	95	0 3
	2962	GIU	гла	Ата		Arg	ьys	GIN	Ата		GIU	Lys	Pne	тте		Phe	GIU
	2963	•	~ ~	-	100	~ 1	~ 1		_	105	_	-1	- 1	~ 7	110	~ 1	•
	2965	Asp	Ага		GIU	GIN	GIU	ьys		Glu	Leu	GIN	тте		val	GIU	His
	2966	_	61	115	61	m)		~ 1	120	- 1	_	_		125	_	_	
	2968	Tyr		Phe	GIn.	Thr	Arg		Leu	GLu	Leu	Lys		гля	Asn	Tyr	Ala
	2969	_	130		_		_	135		_		_	140		_	_	
	2971	_	Gln	lle	Ser	Arg		GLu	Glu	Arg	Glu		GLu	Met	Lys	Lys	
•	2972				_		150	:				155					160
	2974	Tyr	Asn	Ala	Leu		Gln	Arg	His	Thr		Met	Ile	Gln	Thr	-	Val
	2975					165					170					175	
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Output Set: N:\CRF4\12032002\1856617A.raw Seq. [2

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Input Set: A:\SEQUENCE LISTING.txt
Output Set: N:\CRF4\12032002\1856617A.raw
Sec.\4

	2445				000		•								000		
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	3478			995					1000					1005			
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	3481		1010					1015				_	1020				
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	3498	Gln	Val	Gln	Thr	Leu	Pro	Leu	Arg	Glu	Pro	Ser	Leu	Ser	Ser	Ser	Gly
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	3504	Gln	Leu	Lys	Gly	Ser	Gly	Ala	Thr	Pro	Pro	Gly	Ala	Pro			Met
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	3507	Glu	Pro	Ser	Ser	Glv	Asn	Ser	Glv	Pro	Lvs	Gln	Val	Ala	Pro	Val	Leu
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	3510	Leu			Ara	Ara	Asn			Asp	Asn	Ser			Ser	Lvs	Lvs
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	3513			Ala	Thr	Ara			Ala	Glv	Len			Ala	Gln	Ser	Val
E>	3514						1190	u		<u>y</u>		195	Ly J	4 3 4 CI	U 2.11		200
	3516		Ser	Len	Val			Asp	Glu	Val			Ser	Ara	Pro		
	3517		~~r	204		205	<u></u>	1.00	<u> </u>		1210	JU1	JUL	9		.215	nou.
	0017				_	200				-	210					210	

PATENT APPLICATION: US/09/856,617A

DATE: 12/04/2002 TIME: 13:50:11

Input Set : A:\SEQUENCE LISTING.txt
Output Set: N:\CRF4\12032002\1856617A.raw

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	3522 Gly Gly Cys Ser Ser Gln Pro His Ser Tyr Gln Asn His Thr Thr Ser 3523 1235 1240 1245	
	3525 Ser Met Ala Lys Leu Ala Arg Ser Ile Ser Val Gly Glu Asn Pro Gly 3526 1250 1255 1260	
	3528 Leu Ala Thr Glu Pro Gln Ala Pro Ala Pro Ile Arg Ile Ser Pro Phe	
E>	3529 265 1270 1275 1280	
	3531 Asn Lys Leu Ala Leu Pro Ser Arg Ala His Leu Val Leu Asp Ile Pro	
	3532	
	3535 1300 1305 1310	
	3537 Lys Gly Leu Thr His Asn Glu Thr Glu Gln Ser Gly Pro Leu Arg Glu	
	3538	
•	3540 F16 Arg bys Ara hrs thi thi var Gru bys hrs ser cys bed Gry Gru	
	3543 Gly Thr Thr His Lys Ser Arg Thr Glu Cys Gln Ala Tyr Pro Gly Pro	
E>	3544\345	
	3546 Asn His Pro Cys Arg Gln Gln Leu Pro Val Asn Asn Leu Leu Gln Ala	
	3547 1365 1370 1375	
	3549 Glu Ser Leu Gln Pro Leu Ser Pro Glu Lys Thr Arg Asn Pro Val Glu	
	3550 1380 1385 1390	
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	3556 1410 1415 1420	
	3558 Arg Gln Ala Val Glu Leu Tyr Arg Ala Val Thr Ser Cys Lys Thr Pro	
E>	3559 (425 1430 1435 1440	
	3561 Ser Ala Glu Gln Ser His Ile Thr Arg Leu Leu Arg Asp Thr Phe Ser	
	3562 1445 1450 1455	
	3564 Pro Val Arg Gln Glu Leu Glu Val Leu Ala Gly Ala Val Leu Ser Ser	
	3565 1460 1465 1470	
	3567 Pro Gly Gly Ser Pro Gly Ala Val Ala Ala Glu Gln Thr Gln Ala Leu	
•	3568 1475 1480 1485	
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	3740 (27) 3743 <210> SEQ ID NO: 18	
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	7/17 CILY DENGIN. SI	

PATENT APPLICATION: US/09/856,617A

DATE: 12/04/2002 TIME: 13:50:11

Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF4\12032002\1856617A.raw

3745 <212> TYPE: DNA

3746 <213> ORGANISM: Artificial Sequence

3748 <220> FEATURE:

3749 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic DNA

3751 <400> SEQUENCE: 18

3752 atgaattctc agttgttctt tgtgacactg a

31

E--> 3753 1 / 142 - delete

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/856,617A

DATE: 12/04/2002 TIME: 13:50:12

Input Set : A:\SEQUENCE LISTING.txt

Output Set: N:\CRF4\12032002\1856617A.raw

L:712 M:254 E: No. of Bases conflict, LENGTH:Input:4043 Counted:4048 SEQ:2

M:254 Repeated in SeqNo=2

L:2165 M:254 E: No. of Bases conflict, LENGTH:Input:1469 Counted:1472 SEQ:8

L:2167 M:252 E: No. of Seq. differs, <211> LENGTH:Input:1469 Found:1472 SEQ:8

L:2369 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:9

M:332 Repeated in SeqNo=9

L:2622 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:10

M:332 Repeated in SeqNo=10

L:2878 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:11

M:332 Repeated in SeqNo=11

L:3137 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:12

M:332 Repeated in SeqNo=12

L:3484 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:14

M:332 Repeated in SeqNo=14

L:3739 M:254 E: No. of Bases conflict, LENGTH:Input:0 Counted:27 SEQ:17

L:3753 M:254 E: No. of Bases conflict, LENGTH:Input:142 Counted:32 SEQ:18

L:3753 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:2

L:3753 M:252 E: No. of Seq. differs, <211> LENGTH:Input:31 Found:32 SEQ:18



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE UNITED STATES DELIVERY TRANSPORTER OF THE Address COMMISSIONER OF PATENTS AND TRADEMARKS P.O. DOZ 1450 Alexandra, Vinginia 22313-1450

		www.ushtu.gov	
U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATT	Y. DOCKET NO.
09/856,617	Michio Ichimura		766.52
		INTERNATIONAL AF	PLICATION NO.
		РСТ/ЛР99/	/06487
05514		I.A. FILING DATE	PRIORITY DATE
FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA	4665	11/19/1999	11/24/1998

NEW YORK, NY 10112

CONFIRMATION NO. 3220

u371 FORMALITIES LETTER

OC000000010200341

Date Mailed: 06/06/2003

NOTIFICATION OF DEFECTIVE RESPONSE ABANDONMENT

The United States Patent and Trademark Office in its capacity as a Designated / Elected Office (37 CFR 1.495) has made the following determination:

Applicant has failed to properly respond to the notification of MISSING REQUIREMENTS (Form PCT/DO/EO/905), mailed 09/07/2001 within the time period set therein.

Therefore, the above identified application failed to meet the requirements of 35 U.S.C. 371 and 37 CFR 1.495, and is ABANDONED AS TO THE UNITED STATES OF AMERICA.

The following items MUST be furnished within the period set forth below:

- The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):
 - See attached Raw Sequence Listing Error Report.
 - APPLICANT MUST PROVIDE:
 - An initial or substitute paper copy or compact disc of the "Sequence Listing," as well as an amendment directing its entry into the specification.
- For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:
 - For Rules Interpretation, call (703) 308-4216
 - To Purchase Patentin Software, call (703) 306-2600
 - For Patentin Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

A copy of this notice MUST be returned with the response.

BARBARA A CAMPBELL

Telephone: (703) 305-3631

PART 1 - ATTORNEY/APPLICANT COPY

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY, DOCKET NO.
09/856,617	PCT/JP99/06487	766.52

FORM PCT/DO/EO/918 (371 Formalities Notice)



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/856,0//S
Source: PCI/GI
Date Processed by STIC: 5//9/2003

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER.

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (http://www.uspto.gov/ebc/efs/downloads/documents.htm, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- 3. Hand Carry directly to:
 - U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
 - U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
- 4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 04/24/2003



OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/856,617B

DATE: 05/19/2003 TIME: 15:00:41

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Output Set: N:\CRF4\05192003\1856617B.raw

- 3 <110> APPLICANT: KYOWA HAKKO KOGYO CO., LTD.,
- 5 <120> TITLE OF INVENTION: NOVEL POLYPEPTIDE
- 7 <130> FILE REFERENCE: 766.52
- 9 <140> CURRENT APPLICATION NUMBER: US 09/856,617B
- 10 <141> CURRENT FILING DATE: 2001-05-24
- 12 <150> PRIOR APPLICATION NUMBER: H10-332484
- 13 <151> PRIOR FILING DATE: 1998-11-24
- 15 <150> PRIOR APPLICATION NUMBER: H11-248442
- 16 <151> PRIOR FILING DATE: 1999-09-02
- 18 <160> NUMBER OF SEQ ID NOS: 18
- 19 <170> SOFTWARE: PatentIn Ver. 2.0

Does Not Comply
Corrected Diskette Needed

١

ERRORED SEQUENCES

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2041 <221> NAME/KEY: CDS
2042 <222> LOCATION: (7)(1458)
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2049 agc cag gcg gac tct ggc ttc ctg ggg ctg cgg ccg acc tcg gtg gat 99
2050 Ser Gln Ala Asp Ser Gly Phe Leu Gly Leu Arg Pro Thr Ser Val Asp
2051 20 25 30
2053 ccc gct ctg agg cgg cgg cgg ggc ccc aga aac aag aag
2054 Pro Ala Leu Arg Arg Arg Arg Gly Pro Arg Asn Lys Lys Arg Gly
2055 35 40 45
2057 tgg agg agg ctc gcc gag gag ccg ctg ggg tta gag gtc gac cag ttc 195
2058 Trp Arg Arg Leu Ala Glu Glu Pro Leu Gly Leu Glu Val Asp Gln Phe
2059 50 55 60
2061 ctg gaa gac gtc cgg cta cag gag cgc acg acc ggt ggc ttg ttg gca 243
2062 Leu Glu Asp Val Arg Leu Gln Glu Arg Thr Thr Gly Gly Leu Leu Ala
2063 65 70 75
2065 gag gcc cca aac gaa aag ctc ttc ttc gtg gac aca gga ttc aag aga 291
2066 Glu Ala Pro Asn Glu Lys Leu Phe Phe Val Asp Thr Gly Phe Lys Arg
30 35
2069 aaa gaa cca aga aag aag agg acc ttg gtc cag aag aag tca cag cgt 339
2070 Lys Glu Pro Arg Lys Lys Arg Thr Leu Val Gln Lys Lys Ser Gln Arg

DATE: 05/19/2003 PATENT APPLICATION: US/09/856,617B TIME: 15:00:41

Input Set : A:\766.52.txt
Output Set: N:\CRF4\05192003\1856617B.raw

					100					105					110		
2073 c	ctc	cag	aaa	ccc	tta	cgg	gtt	gac	ctt	gcc	ctt	gag	aat	cat	tct	aag	387
2074 I	Leu	Gln	Lys	Pro	Leu	Arg	Val	Asp	Leu	Ala	Leu	Glu	Asn	His	Ser	Lys	
2075				115					120					125			
2077 a	atc	cct	gct	ccc	aaa	gac	atc	ctc	gca	cat	cag	gtc	cct	aat	gcc	aag	435
2078]	Ile	Pro	Ala	${\tt Pro}$	Lys	Asp	Ile	Leu	Ala	His	Gln	Val	Pro	Asn	Ala	Lys	
2079			130					135					140				
2081 a	aag	ctc	agg	cga	aag	gag	gag	tta	tgg	gag	aaa	ctg	gca	aag	cag	ggc	483
2082 I	Lys	Leu	Arg	Arg	Lys	Glu	Glu	Leu	Trp	Glu	Lys	Leu	Ala	Lys	Gln	Gly	
2083		145					150	•				155				_	
2085 g	gaa	ctg	ccc	agg	gat	gtg	cgc	aag	gca	cag	gcc	cga	ctc	ctt	agc	cct	531
2086	Glu	Leu	Pro	Arg	Asp	Val	Arg	Lys	Ala	Gln	Ala	Arg	Leu	Leu	Ser	Pro	
2087 1	160					165					170		•			175	
2089 d	ccc	aca	cca	aag	gcc	aaa	cct	ggg	ccc	cag	gac	atc	att	gag	cga	ccc	579
2090 E	Pro	Thr	Pro	Lys	Ala	Lys	Pro	Gly	Pro	Gln	Asp	Ile	Ile	Glu	Arg	Pro	
2091					180					185					190		
2093 t	ttc	tat	gac	ctc	tgg	aac	cca	gac	aac	cct	ctg	gac	acg	cct	ttg	att	627
2094 I	Phe	Tyr	Asp	Leu	Trp	Asn	Pro	Asp.	Asn	Pro	Leu	Asp	Thr	Pro	Leu	Ile	
2095				195					200					205			
2097 g	ggt	cag	gat	gca	ttt	ttt	ctg	gaa	cag	acc	aag	aag	aaa	ggc	gtg	agg	675
2098	Gly	Gln	Asp	Ala	Phe	Phe	Leu	Glu	Gln	Thr	Lys	Lys	Lys	Gly	Val	Arg	
2099			210					215					220				
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2·102 A	Arg	Pro	Gln	Arg	Leu	His	Ile	Lys	Pro	Ser	Gln	Val	Pro	Ala	Val	Glu	
2103		225					230					235					
2105 q	gtg	att	cct	gca	gga	gcc	tcc	tac	aac	cca	acc	ttt	gaa	gat	cac	cag	771
2106 V	Val	Ile	Pro	Ala	Gly	Ala	Ser	Tyr	Asn	Pro	Thr	Phe	Glu	Asp	His	Gln	
2107 2						245					250					255	
												~~~	aat				819
2109	gcc	ctg	ctt	cga	gag	gcc	cat	gag	gtg	gag	ctg	Cag	cgt	gag	aaa	gag	013
2110 A	gcc Ala	ctg Leu	ctt Leu	cga Arg	Glu	gcc Ala	cat His	gag Glu	gtg Val	Glu	Leu	Gln	Arg	gag Glu	aaa Lys	gag Glu	.013
2110 <i>I</i> 2111	Ala	Leu	Leu	Arg	Glu 260	Ala	His	Glu	Val	Glu 265	Leu	Gln	Arg	Glu	Lys 270	Glu	•
2110 A 2111 2113 q	Ala	Leu gaa	Leu aag	Arg ctg	Glu 260 gag	Ala cga	His	Glu ctg	Val gcc	Glu 265 ctg	Leu	Gln	Arg tca	Glu gag	Lys 270 caa	Glu gct	867
2110 A 2111 2113 Q 2114 A	Ala	Leu gaa	Leu aag	Arg ctg Leu	Glu 260 gag	Ala cga	His	Glu ctg	Val gcc Ala	Glu 265 ctg	Leu	Gln	Arg tca	Glu gag Glu	Lys 270 caa	Glu gct	•
2110 A 2111 2113 Q 2114 A 2115	Ala gca Ala	Leu gaa Glu	Leu aag Lys	Arg ctg Leu 275	Glu 260 gag Glu	Ala cga Arg	His cag Gln	Glu ctg Leu	Val gcc Ala 280	Glu 265 ctg Leu	Leu ccc Pro	Gln acc Thr	Arg tca Ser	Glu gag Glu 285	Lys 270 caa Gln	Glu gct Ala	867
2110 A 2111 2113 Q 2114 A 2115 2117 Q	Ala gca Ala gcc	Leu gaa Glu acc	Leu aag Lys cag	ctg Leu 275 gag	Glu 260 gag Glu tcc	Ala cga Arg gtg	His cag Gln ttt	Glu ctg Leu cgg	yal gcc Ala 280 gag	Glu 265 ctg Leu atg	Leu ccc Pro tgt	Gln acc Thr gag	Arg tca Ser ggc	Glu gag Glu 285 ctg	Lys 270 caa Gln ctg	Glu gct Ala gag	•
2110 A 2111 2113 Q 2114 A 2115 2117 Q 2118 A	Ala gca Ala gcc	Leu gaa Glu acc	Leu aag Lys cag Gln	ctg Leu 275 gag	Glu 260 gag Glu tcc	Ala cga Arg gtg	His cag Gln ttt	Glu ctg Leu cgg Arg	yal gcc Ala 280 gag	Glu 265 ctg Leu atg	Leu ccc Pro tgt	Gln acc Thr gag	tca Ser ggc Gly	Glu gag Glu 285 ctg	Lys 270 caa Gln ctg	Glu gct Ala gag	867
2110	Ala gca Ala gcc Ala	Leu gaa Glu acc Thr	aag Lys cag Gln 290	Arg ctg Leu 275 gag Glu	Glu 260 gag Glu tcc Ser	Ala cga Arg gtg Val	cag Gln ttt Phe	ctg Leu cgg Arg 295	yal gcc Ala 280 gag Glu	Glu 265 ctg Leu atg Met	Leu ccc Pro tgt Cys	Gln acc Thr gag Glu	tca Ser ggc Gly 300	Glu gag Glu 285 ctg Leu	Lys 270 caa Gln ctg Leu	Glu gct Ala gag Glu	867 915
2110 A 2111 2113 Q 2114 A 2115 2117 Q 2118 A 2119 2121 Q	gca Ala gcc Ala	Leu gaa Glu acc Thr	Leu aag Lys cag Gln 290 gat	ctg Leu 275 gag Glu	Glu 260 gag Glu tcc Ser	Ala cga Arg gtg Val gat	His cag Gln ttt Phe	ctg Leu cgg Arg 295 cat	yal gcc Ala 280 gag Glu	Glu 265 ctg Leu atg Met	ccc Pro tgt Cys	Gln acc Thr gag Glu cgt	tca Ser ggc Gly 300 gcc	gag Glu 285 ctg Leu	Lys 270 caa Gln ctg Leu	Glu gct Ala gag Glu cca	867
2110 A 2111 2113 Q 2114 A 2115 2117 Q 2118 A 2119 2121 Q 2122 Q	gca Ala gcc Ala	Leu gaa Glu acc Thr tct Ser	Leu aag Lys cag Gln 290 gat	ctg Leu 275 gag Glu	Glu 260 gag Glu tcc Ser	Ala cga Arg gtg Val gat	His cag Gln ttt Phe gag Glu	ctg Leu cgg Arg 295 cat	yal gcc Ala 280 gag Glu	Glu 265 ctg Leu atg Met	ccc Pro tgt Cys	Gln acc Thr gag Glu cgt Arg	tca Ser ggc Gly 300 gcc	gag Glu 285 ctg Leu	Lys 270 caa Gln ctg Leu	Glu gct Ala gag Glu cca	867 915
2110 A 2111 2113 Q 2114 A 2115 2117 Q 2118 A 2119 2121 Q 2122 Q 2123	Ala gca Ala gcc Ala gag	Leu gaa Glu acc Thr tct Ser 305	Leu aag Lys cag Gln 290 gat Asp	ctg Leu 275 gag Glu ggt Gly	Glu 260 gag Glu tcc Ser gag Glu	Ala cga Arg gtg Val gat Asp	His cag Gln ttt Phe gag Glu 310	ctg Leu cgg Arg 295 cat His	yal gcc Ala 280 gag Glu gag Glu	Glu 265 ctg Leu atg Met gca Ala	ccc Pro tgt Cys ggc Gly	Gln acc Thr gag Glu cgt Arg 315	tca Ser ggc Gly 300 gcc Ala	gag Glu 285 ctg Leu ggg Gly	Lys 270 caa Gln ctg Leu cag Gln	Glu gct Ala gag Glu cca Pro	<ul><li>867</li><li>915</li><li>963</li></ul>
2110 A 2111 2113 Q 2114 A 2115 2117 Q 2118 A 2119 2121 Q 2122 Q 2123 2125 Q	Ala gca Ala gcc Ala gag Glu	gaa Glu acc Thr tct Ser 305 gct	Leu aag Lys cag Gln 290 gat Asp	ctg Leu 275 gag Glu ggt Gly	Glu 260 gag Glu tcc Ser gag Glu	Ala cga Arg gtg Val gat Asp acc	His cag Gln ttt Phe gag Glu 310 acc	ctg Leu cgg Arg 295 cat His	yal gcc Ala 280 gag Glu gag Glu	Glu 265 ctg Leu atg Met gca Ala	Leu ccc Pro tgt Cys ggc Gly	Gln acc Thr gag Glu cgt Arg 315 act	tca Ser ggc Gly 300 gcc Ala	gag Glu 285 ctg Leu ggg Gly	Lys 270 caa Gln ctg Leu cag Gln	gct Ala gag Glu cca Pro	867 915
2110 A 2111 2113 Q 2114 A 2115 2117 Q 2118 A 2119 2121 Q 2122 Q 2123 2125 Q 2126 Q	Ala gca Ala gcc Ala gag Glu gag	gaa Glu acc Thr tct Ser 305 gct	Leu aag Lys cag Gln 290 gat Asp	ctg Leu 275 gag Glu ggt Gly	Glu 260 gag Glu tcc Ser gag Glu	Ala cga Arg gtg Val gat Asp acc Thr	His cag Gln ttt Phe gag Glu 310 acc	ctg Leu cgg Arg 295 cat His	yal gcc Ala 280 gag Glu gag Glu	Glu 265 ctg Leu atg Met gca Ala	Leu ccc Pro tgt Cys ggc Gly ccc Pro	Gln acc Thr gag Glu cgt Arg 315 act	tca Ser ggc Gly 300 gcc Ala	gag Glu 285 ctg Leu ggg Gly	Lys 270 caa Gln ctg Leu cag Gln	Glu gct Ala gag Glu cca Pro ggt Gly	<ul><li>867</li><li>915</li><li>963</li></ul>
2110 A 2111 2113 Q 2114 A 2115 2117 Q 2118 A 2119 2121 Q 2122 Q 2123 Q 2126 Q 2127 3	Ala gca Ala gcc Ala gag Glu gag Glu 320	gaa Glu acc Thr tct Ser 305 gct Ala	Leu aag Lys cag Gln 290 gat Asp ggt Gly	ctg Leu 275 gag Glu ggt Gly gat Asp	Glu 260 gag Glu tcc Ser gag Glu ggg Gly	Ala cga Arg gtg Val gat Asp acc Thr 325	His cag Gln ttt Phe gag Glu 310 acc Thr	Clu ctg Leu cgg Arg 295 cat His gag Glu	yal gcc Ala 280 gag Glu gag Glu atc Ile	Glu 265 ctg Leu atg Met gca Ala tca Ser	Leu ccc Pro tgt Cys ggc Gly ccc Pro 330	Gln acc Thr gag Glu cgt Arg 315 act Thr	tca Ser ggc Gly 300 gcc Ala ggt Gly	gag Glu 285 ctg Leu ggg Gly gct Ala	Lys 270 caa Gln ctg Leu cag Gln gct Ala	Glu gct Ala gag Glu cca Pro ggt Gly 335	<ul><li>867</li><li>915</li><li>963</li><li>1011</li></ul>
2110 A 2111 2113 Q 2114 A 2115 2117 Q 2118 A 2119 2121 Q 2122 Q 2123 Q 2125 Q 2127 3 2129 Q	Ala gca Ala gcc Ala gag Glu gag Glu 320 cct	gaa Glu acc Thr tct Ser 305 gct Ala	Leu aag Lys cag Gln 290 gat Asp ggt Gly aag	ctg Leu 275 gag Glu ggt Gly gat Asp	Glu 260 gag Glu tcc Ser gag Glu ggg Gly atg	cga Arg gtg Val gat Asp acc Thr 325 gag	His cag Gln ttt Phe gag Glu 310 acc Thr	Ctg Leu Cgg Arg 295 cat His gag Glu	yal gcc Ala 280 gag Glu gag Glu atc Ile	Glu 265 ctg Leu atg Met gca Ala tca Ser	ccc Pro tgt Cys ggc Gly ccc Pro 330 cag	acc Thr gag Glu cgt Arg 315 act Thr	tca ser ggc Gly 300 gcc Ala ggt Gly	gag Glu 285 ctg Leu ggg Gly gct Ala	Lys 270 caa Gln ctg Leu cag Gln gct Ala	Glu  gct Ala  gag Glu  cca Pro  ggt Gly 335 gag	<ul><li>867</li><li>915</li><li>963</li></ul>
2110 A 2111 2113 Q 2114 A 2115 2117 Q 2118 A 2119 2121 Q 2122 Q 2123 Q 2126 Q 2127 3 2129 Q 2130 B	Ala gca Ala gcc Ala gag Glu gag Glu 320 cct	gaa Glu acc Thr tct Ser 305 gct Ala	Leu aag Lys cag Gln 290 gat Asp ggt Gly aag	ctg Leu 275 gag Glu ggt Gly gat Asp	Glu 260 gag Glu tcc Ser gag Glu ggg Gly atg Met	cga Arg gtg Val gat Asp acc Thr 325 gag	His cag Gln ttt Phe gag Glu 310 acc Thr	Ctg Leu Cgg Arg 295 cat His gag Glu	yal gcc Ala 280 gag Glu gag Glu atc Ile	Glu 265 ctg Leu atg Met gca Ala tca Ser gag Glu	ccc Pro tgt Cys ggc Gly ccc Pro 330 cag	acc Thr gag Glu cgt Arg 315 act Thr	tca ser ggc Gly 300 gcc Ala ggt Gly	gag Glu 285 ctg Leu ggg Gly gct Ala	Lys 270 caa Gln ctg Leu cag Gln gct Ala	Glu  gct Ala  gag Glu  cca Pro  ggt Gly 335 gag	<ul><li>867</li><li>915</li><li>963</li><li>1011</li></ul>
2110 A 2111 2113 Q 2114 A 2115 2117 Q 2118 A 2119 2121 Q 2122 Q 2123 Q 2126 Q 2127 3 2129 Q 2130 B 2131	Ala gca Ala gcc Ala gag Glu gag Glu cct Pro	Leu gaa Glu acc Thr tct Ser 305 gct Ala gag Glu	Leu aag Lys cag Gln 290 gat Asp ggt Gly aag Lys	ctg Leu 275 gag Glu ggt Gly gat Asp	Glu 260 gag Glu tcc Ser gag Glu ggg Gly atg Met 340	cga Arg gtg Val gat Asp acc Thr 325 gag Glu	His cag Gln ttt Phe gag Glu 310 acc Thr aag Lys	Clu ctg Leu cgg Arg 295 cat His gag Glu aag Lys	yal gcc Ala 280 gag Glu gag Glu atc Ile acg	Glu 265 ctg Leu atg Met gca Ala tca Ser gag Glu 345	Leu ccc Pro tgt Cys ggc Gly ccc Pro 330 cag Gln	Gln acc Thr gag Glu cgt Arg 315 act Thr cag Gln	tca Ser ggc Gly 300 gcc Ala ggt Gly cgg Arg	gag Glu 285 ctg Leu ggg Gly gct Ala cgg	Lys 270 caa Gln ctg Leu cag Gln gct Ala cgg Arg 350	gct Ala gag Glu cca Pro ggt Gly 335 gag Glu	<ul><li>867</li><li>915</li><li>963</li><li>1011</li><li>1059</li></ul>
2110 A 2111 2113 Q 2114 A 2115 2117 Q 2118 A 2119 2121 Q 2122 Q 2123 Q 2125 Q 2126 Q 2127 3 2129 Q 2130 B 2131 Q	Ala gca Ala gcc Ala ggc Glu gag Glu GCC CCC GCC GCC GCC GCC GCC GCC GCC GC	Leu gaa Glu acc Thr tct Ser 305 gct Ala gag Glu gct	Leu aag Lys cag Gln 290 gat Asp ggt Gly aag Lys	ctg Leu 275 gag Glu ggt Gly gat Asp agg Arg	Glu 260 gag Glu tcc Ser gag Glu ggg Gly atg Met 340 aag	Ala cga Arg gtg Val gat Asp acc Thr 325 gag Glu ctg	His cag Gln ttt Phe gag Glu 310 acc Thr aag Lys	Clu ctg Leu cgg Arg 295 cat His gag Glu aag Lys	yal gcc Ala 280 gag Glu gag Glu atc Ile acg Thr	Glu 265 ctg Leu atg Met gca Ala tca Ser gag Glu 345 cag	Leu ccc Pro tgt Cys ggc Gly ccc Pro 330 cag Gln	Gln acc Thr gag Glu cgt Arg 315 act Thr cag Gln gca	tca Ser ggc Gly 300 gcc Ala ggt Gly cgg Arg	gag Glu 285 ctg Leu ggg Gly gct Ala cgg Arg	Lys 270 caa Gln ctg Leu cag Gln gct Ala cgg Arg 350 gca	Glu gct Ala gag Glu cca Pro ggt Gly 335 gag Glu gcc	<ul><li>867</li><li>915</li><li>963</li><li>1011</li></ul>
2110 A 2111 2113 Q 2114 A 2115 2117 Q 2118 A 2119 2121 Q 2122 Q 2123 Q 2126 Q 2127 3 2129 Q 2130 B 2131	Ala gca Ala gcc Ala ggc Glu gag Glu GCC CCC GCC GCC GCC GCC GCC GCC GCC GC	Leu gaa Glu acc Thr tct Ser 305 gct Ala gag Glu gct	Leu aag Lys cag Gln 290 gat Asp ggt Gly aag Lys	ctg Leu 275 gag Glu ggt Gly gat Asp agg Arg	Glu 260 gag Glu tcc Ser gag Glu ggg Gly atg Met 340 aag	Ala cga Arg gtg Val gat Asp acc Thr 325 gag Glu ctg	His cag Gln ttt Phe gag Glu 310 acc Thr aag Lys	Clu ctg Leu cgg Arg 295 cat His gag Glu aag Lys	yal gcc Ala 280 gag Glu gag Glu atc Ile acg Thr	Glu 265 ctg Leu atg Met gca Ala tca Ser gag Glu 345 cag	Leu ccc Pro tgt Cys ggc Gly ccc Pro 330 cag Gln	Gln acc Thr gag Glu cgt Arg 315 act Thr cag Gln gca	tca Ser ggc Gly 300 gcc Ala ggt Gly cgg Arg	gag Glu 285 ctg Leu ggg Gly gct Ala cgg Arg	Lys 270 caa Gln ctg Leu cag Gln gct Ala cgg Arg 350 gca	Glu gct Ala gag Glu cca Pro ggt Gly 335 gag Glu gcc	867 915 963 1011 1059

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DATE: 05/19/2003 PATENT APPLICATION: US/09/856,617B TIME: 15:00:41

Input Set : A:\766.52.txt

Output Set: N:\CRF4\05192003\1856617B.raw

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	2149 2150 2151							_						1299
	2153 2154 2155								-					 1347
	2157 2158 2159													1395
	2161 2162 2163													1443
E>	2165 2166 <b>2167</b>	Arg		_	_	tag	ctg	tgca	gat (	9				1472

#### VERIFICATION SUMMARY PATENT APPLICATION: US/09/856,617B

DATE: 05/19/2003 TIME: 15:00:42

Input Set : A:\766.52.txt
Output Set: N:\CRF4\05192003\I856617B.raw

L:2167 M:252 E: No. of Seq. differs, <211> LENGTH:Input:1469 Found:1472 SEQ:8

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